The behavior of sucrose upon removing from this atmosphere is noteworthy. While the other sugars and products came to a condition of equilibrium with the laboratory atmosphere in about 6 wks., the moist sucrose never reached this condition but continued slowly to lose moisture during a period of 2 yrs. The results are given in Table IV.

TABLE IV—LOSS OF MOISTURE FROM WET SUCROSE DURING 2 YRS. ON EXPOSURE TO ROOM ATMOSPHERE

Date	Moisture Per cent	Date	Moisture Per cent
December 17, 1919	18.35	January 1, 1921	7.17
February 1, 1920	11.58	April 1, 1921	6.35
May 1, 1920	10.99	July 1, 1921	4.21
July 1, 1920	9.19	October 1, 1921	2.42
October 1, 1920	7.75	January 1, 1922	1.72

The tenacity of wet sucrose for retaining its moisture is probably due to the occlusion of water within aggregates of crystals which retard evaporation.

While the absorptive power of the substances studied in this investigation was highest in periods of high humidity and lowest in periods of low humidity, no fixed relationship can be established between percentage humidity and moisture content under ordinary conditions owing to the rapidity of atmospheric fluctuations and the inevitable lag in the absorptive power of each material. On a curve of falling and rising humidity two points on the same horizontal can be found of similar atmospheric saturation, but the amount of absorbed moisture in exposed materials at those points is vastly different. This is shown in Table V, which was exhibited at the Philadelphia Meeting in 1919, where various exposed substances were weighed during a period of falling and rising humidity. On July 24 and August 4 the atmospheric conditions as regards temperature and humidity were exactly alike but the percentages of absorbed moisture upon these days varied greatly, the difference in the case of levulose exceeding 28 per cent. This lag, or slowness of adjustment of substance to its equilibrium with the atmosphere, nullifies the attempt to measure atmospheric moisture by the so-called "weight" hygrometer, in which a pointer is moved by the gain or loss in weight of some hygroscopic substance such as gelatin.

TABLE V—SHOWING INFLUENCE OF LAG UPON MOISTURE ABSORPTIVE POWER

	Falling Humidity		Rising Humidity	
	July 23 24.5° C. 84% Humidity	July 24 25° C. 70% Humidity	August 4 25° C. 70% Humidity	August 8 26.1° C. 82% Humidity
Material	Per cent	Per cent	Per cent	Per cent
Levulose	47.3	46.8	18.5	31.8
Agar	29.7	29.4	23.3	26.3
Gelatin	25.0	24.6	18.9	21.1
Peptone	21.0	20.9	11.5	14.5
Bread	17.8	17.2	10.9	13.6
Cellulose	9.3	8.9	6.2	7.6
Sucrose	0.4	0.3	0.1	0.2

The moisture absorptive power of the sugars and other carbohydrates has many practical bearings. There is first the question of chemical dealers and manufacturers preparing sugars only in the most stable form. Raffinose, for example, should never be prepared for trade purposes as the anhydride but as the stable pentahydrate. There is, second, the question of the legal standard for moisture in certain carbohydrate food products. The maximum permissible moisture content of starchy foods, such as flour, is a point about which there is considerable difference of opinion. There is, third, the question of the best means of preventing farinaceous foods, such as cake, from drying out. Levulose sirup has been proposed as the best anti-desiccating agent. But the experiments show that ordinary invert sugar and honey are equal to levulose in moisture absorptive power. There is, fourth, the important physiological question of the retention of moisture by seeds, buds, leaves, and the growing parts of plants during germination or in periods of drought. It is here, no doubt, that the hemicelluloses, of which agar is a type, play an important function as moisture holders. These are only a few of the many practical bearings which underly the subject of the moisture absorptive power of the sugars and carbohydrates.

What Next in Europe?

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The increasing literature of commonsense about economics is an indication of passage from the acidity of war to the alkalinity of sweet harmony, with a reaction that will precipitate ultimate payment by Europe of our war loans.

The authors are not visionary dreamers or chemists out of a job. For instance, Frank A. Vanderlip of the National City Bank, New York, in his book "What Next in Europe?" makes a financial, engineering analysis of the European situation as it relates to American welfare and shows that we must sink or swim intellectually and industrially with Europe.

Discussing labor, he says, "The new attitude of labor appears to me to be perhaps the most promising element in the European outlook. I have been universally well impressed with the grasp of economic principles which these men have shown and with their intellectual ability to argue their case. Europe is sharply awake to the horrors that come upon innocent industrious people, who are highly specialized in their craftmanship and can live only by the exchange of their products, if the whole machinery of international exchange is thrown into confusion by war."

He proposes a plan of rehabilitation under American direction which would result in ultimate payment of our eleven billions loaned Europe; a plan that would furnish abundant employment for many years to our engineering industries and that would be vividly attractive to American technical men, since it would yield a new southeastern Europe quite like industrial America. He would establish great scientific laboratories which "through stimulation of technical education and scientific investigation would give the world new knowledge of incalculable value. The expenditure should be made with great vision of the future, rather than as a palliative to ease the distress of the moment."

"The war has made a great awakening in millions of dormant minds. It is possible that newly awakened impulses, if they can only be harnessed up to the machinery of production and distribution, can result in great actual improvement of civilization."

Mr. Vanderlip's supreme recognition of the part that engineers can play in rehabilitation is epitomized in his conclusion that "if administration of the whole project of expenditure were placed in the hands of a Commission, headed by Herbert Hoover, I think we could all safely go about our domestic affairs and find nothing but satisfaction as we read the report of the work."

The members of the Committee of the League of Nations on International Coöperation in Intellectual Work include in the sciences: Mme. Curie; Prof. Albert Einstein; Miss Bonnevie, professor of zoölogy at Christiania; Dr. A. De Castro, of the medical faculty of the University of Rio de Janeiro; and Dr. L. De Torres Quevedo, director of the electromedical laboratory of Madrid. The commission will include a consideration of the following topics: possibilities of encouraging and improving the organization of scientific research by means of congresses, commissions, and institutes; the international relations between universities and means for the organization of an international bureau of universities and possibly an international university; and international organization of scientific bibliography and exchange of scientific publications.